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10/565,744	01/23/2006	Toshihiro Kowaki	090746	2020
38834 7590 09/17/2009 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700			EXAMINER	
			DOLLINGER, MICHAEL M	
WASHINGTON, DC 20036		ART UNIT	PAPER NUMBER	
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			09/17/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

	Application No.	Applicant(s)					
	10/565,744	KOWAKI ET AL.					
Office Action Summary	Examiner	Art Unit					
	MIKE DOLLINGER	1796					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Responsive to communication(s) filed on <u>24 Ju</u>	ne 2009						
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<i>,</i> —	<i>,</i> —						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-3 and 5-22</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-3 and 5-22</u> is/are rejected.							
7) Claim(s) is/are objected to.							
· · · · ·							
Application Papers							
9)☐ The specification is objected to by the Examine	•						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:							
1.☐ Certified copies of the priority documents have been received.							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
oco ano attached detalled Office action for a list of the certified copies not received.							
Attachment(s) 1) M Notice of References Cited (RTO 902) 1) M Notice of References Cited (RTO 902)							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) 🔲 Information Disclosure Statement(s) (PTO/SB/08) 5) 🔲 Notice of Informal Patent Application							
Paper No(s)/Mail Date <u>02/05/2009</u> . 6)							

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 1. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 2. Claim 6 recites the limitation "the projection on the fiber surface" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- 3. Claim 7 recites the limitation "the projection on the hair surface" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 4. Claims 1-3, 5 and 8-22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 and 7-22 of copending Application No. 11/345,952. Although the conflicting claims are not identical, they are not patentably distinct from each other. The difference between the copending claims and the instant claims is that the copending claims contain an additional element of up to 60% of human hair. It is clear that all the elements of the instant claims are to be found in the copending claims (as the instant claims fully encompass copending claims). The difference between the instant claims and the copending claims lies in the fact that the copending claims include more elements and are thus more specific. Thus the invention of copending claims is in effect a "species" of the "generic" invention of instant claims. It has been held that the generic invention is "anticipated" by the "species". See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since instant claims are anticipated by the copending claims, they are not patentably distinct from each other.
- 5. The other difference between the copending claims and the instant claims is that the range of repeating units of the brominated epoxy flame retardant are not exactly the same but overlapping. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575,

16 USPQ2d 1934 (Fed. Cir. 1990), *In re Geisler*, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997).

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

- 6. Claims 1-3 and 5 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 6 of U.S. Patent No. 7,501,463. Although the conflicting claims are not identical, they are not patentably distinct from each other. The differences between the copending claims and the instant claims are that 1) copending claim 1 contains an additional component C reaction accelerator and 2) the range for the subscript m in formula 1 of the copending claims is different from ranges of the subscript m in formulae 1, 2 and 5 in the instant claims. Regarding the difference 1), the instant claims have comprising language that is open to additional components. Regarding the difference 2), the ranges of the subscript m are overlapping; in the case where the claimed ranges overlap or lie inside ranges disclosed by the prior a *prima facie* case of obviousness exists *In re Wertheim*, 541 F.2d 257, 1911 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).
- 7. Claims 1-3, 5, 9, 10, 21 and 22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 4, 7-13 and 18 of copending Application No. 10/592,393. Although the conflicting claims

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are not identical, they are not patentably distinct from each other. The differences between the copending claims and the instant claims are that 1) copending claim 1 contains an additional component C phosphorous compound and 2) the ranges for the subscripts in formulae 1-4 of the copending claims is different from ranges of the subscripts in formulae 1-7 in the instant claims. Regarding the difference 1), the instant claims have comprising language that is open to additional components. Regarding the difference 2), the ranges of the subscripts are overlapping; in the case where the claimed ranges overlap or lie inside ranges disclosed by the prior a *prima facie* case of obviousness exists *In re Wertheim*, 541 F.2d 257, 1911 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-3, 5-9, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al (WO03/008679, herein US 7,332,563 B2 is used as an English language translation) in view of Hochberg et al (US 4,732,921).

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9. Masuda et al disclose a polyester based fiber and artificial hair made therefrom comprising polyalkylene terephthalate [abstract] which is selected from the group consisting of polyethylene terephthalate, polypropylene terephthalate and polybutylene terephthalate [3:34-38]. The fiber has fine protrusions on the surface of the fiber with the major axis of the protrusion is 0.2 to 20 µm, the minor axis is 0.1 to 10 µm, the height is 0.1 to 2 µm, and the number of protrusions per 100 µm² fiber surface is at least 1 [7:8-13]. The fiber contains an additional component (B) which is a polyarylate [3:32] that is in particulate form [22:36-37]. The fibers are formed through melt spinning [abstract] and have a finiteness of 30 to 70 dtex [25:50-51]. In the examples, the fibers are spun with a coloring agent (PESM 6100 containing carbon black) [29:23-25] which reads on spin-dyeing and inorganic fine particles.

- 10. Regarding claim 6, since the protrusions (projections) of Masuda et al are the same size as the claimed projection, the fibers are made from the same main materials, and processed in the same way (melt spinning), the protrusions of Masuda et al should be substantially identical to the projections of the present claims and henceforth the protrusions of Masuda et al are held to be inherently amorphous.
- 11. Regarding claim 21, Masuda et al discloses that the artificial hair obtained is a silk-like crimped fiber [25:49-50]. However, omission of an element and its function is obvious if the function of the element is not desired, see *ex parte Wu*, 10 USPQ 2031 (Bd. Pat. App. & Inter. 1989).

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12. Masuda et al do not disclose a flame retardant of corresponding to the claimed brominated epoxy flame retardant. However, Masuda et al do teach that the hair fiber may include additional flame retardants [23:10-15].

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13. Hochberg et al disclose a flame retardant for 40 to 90 part by weight of polybutylene terephthalate and 5 to 20 parts by weight of halogenated bisphenol A diglycidyl ether polymer [4:3-8]. The flame retardant is of the formula:

wherein n is an integer describing the degree of polymerization and is sufficient to provide a molecular weight of from about 20,000 to about 40,000, e.g., at least 32; X is a bromine or chlorine atom; and I may be the same or different for each aromatic substituent and is an integer of 1 to 4 [3:43-4:2]. Hochberg et al teach that the halogenated epoxy flame retardant provides a fiber with vastly improved fatigue strength and melt flow characteristics over fibers with other flame retardants [4:10-19].

14. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have prepared a polyester fiber with minute projections and comprising a halogenated epoxy flame retardant because Masuda et al teach that it is

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within the skill of the art to prepare a polyester fiber with minute protrusions and Hochberg et al teach that it is within the skill of the art to add a brominated epoxy resin flame retardant. One would have been motivated to do use the flame retardant of Hochberg et al in the polyester fiber of Masuda et al because Masuda et al teach that the polyester fiber may contain additional flame retardants and Hochberg et al teach that the halogenated epoxy flame retardant provides a fiber with vastly improved fatigue strength and melt flow characteristics over fibers with other flame retardants. Absent any evidence to the contrary, there would have been a reasonable expectation of success in using the flame retardant of Hochberg et al in the fiber of Masuda et al.

- 15. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al (WO03/008679, herein US 7,332,563 B2 is used as an English language translation) in view of Hochberg et al (US 4,732,921) and further in view of Kishida et al (US 4,562,216).
- 16. Masuda et al in view of Hochberg et al do not disclose an inorganic fine particle additive of the type claimed in claim 10. However, Masuda et al do teach that the hair fiber may include additional flame retardants [23:10-15].
- 17. Kishida et al disclose flame retardant polyester resin compositions comprising 1 to 20 parts by weight of a flame retardant of formula I [2:38-40] per 100 parts by weight of thermoplastic polyester [2:49-50]. Formula I has the general formula:

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$$\begin{array}{c} \text{CH}_{2}\text{-CH} - \text{CH}_{2} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{X} \end{array} \xrightarrow{\text{CH}_{2}\text{-CH}_{2}\text{-CH}_{2}\text{-CH}_{2}} \begin{array}{c} \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \end{array} \xrightarrow{\text{CH}_{2}\text{-CH}_{2}\text{-CH}_{2}\text{-CH}_{2}} \begin{array}{c} \text{CH}_{2} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \\ \text{CH}_{3} \end{array}$$

in which X is hydrogen, chlorine or bromine and I is an average value of 0-11 [2:60-3:11]. The flame retardant is preferably used in combination with an inorganic material [2:28-31] which is preferably talc, kaolin, silica, mica, and others [7:12-16]. Kishida et al that the flame retardant in combination with the inorganic compound further improves flame retardancy [2:28-31] and that the drip resistance is also improved [7:9-12].

18. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have prepared a polyester fiber with minute projections and comprising a halogenated epoxy flame retardant and inorganic particle because Masuda et al in view of Hochberg et al teach that it is within the skill of the art to prepare a polyester fiber with minute protrusions and a brominated epoxy flame retardant and Kishida et al teach that it is within the skill of the art to combine a very similar brominated epoxy resin flame retardant preferably with an inorganic compound. One would have been motivated to do use the inorganic compounds of Kishida et al in the polyester fiber of Masuda et al in view of Hochberg et al because Masuda et al teach that the polyester fiber may contain additional flame retardants and Kishida et al teach that the halogenated epoxy flame retardant and inorganic particle results in polyester

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composition with improved flame retardancy and drip resistance. Absent any evidence to the contrary, there would have been a reasonable expectation of success in using the inorganic compounds of Kishida et al in combination with the flame retardant Hochberg et al in the fiber of Masuda et al.

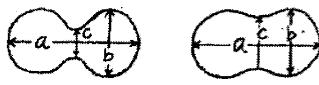
- 19. Claims 11-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al (WO03/008679, herein US 7,332,563 B2 is used as an English language translation) in view of Hochberg et al (US 4,732,921) as applied to claims 1-3 above, and further in view of Park (KR 10-0215251 B1).
- 20. Masuda et al in view of Hochberg et al do not disclose polyester fibers with a cross section as claimed in claims 11 and 13 or with a hydrophilic surface treating agent.
- 21. Park discloses a polyester monofilament for manmade hair spun into a cross section of a pentagonal star shape, a clover leaf shape or a hexagonal star shape and thereafter treated on the external surface with a mixture including a surfactant [page 1 lines 24-31]. The clover leaf shape reads on a four-leaf shape and a shape with four circles lapped or brought into contact with each other. The cross section of the clover leaf shaped fiber has a degree of modification slightly greater than 2 [page 3 FIG. 1b]. Park teaches that the present manmade hair filament is similar to natural hair due to reduced gloss [page 1 lines 20-24].
- 22. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have prepared a fire retardant polyester fiber for artificial hair

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with projections, a brominated epoxy flame retardant, a cross section that is star shaped or three to eight leaf shaped and a hydrophilic surface treating agent because Masuda et al in view of Hochberg et al teach that it is within the skill of the art to prepare a polyester fiber for artificial hair by blending a polyalkylene terephthalate with a brominated epoxy resin flame retardant and Park teaches that it is within the skill of the art to form a manmade hair filament with a cross section of a star or clover (four leaf) and a surfactant. One would have been motivated to do use the cross section and surfactant of Park because Park teaches that this reduces gloss and results in a more natural hair. Absent any evidence to the contrary, there would have been a reasonable expectation of success in using the cross section and surfactant of Park with the fiber composition of Masuda et al in view of Hochberg et al.

- 23. Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al (WO03/008679, herein US 7,332,563 B2 is used as an English language translation) in view of Hochberg et al (US 4,732,921) as applied to claims 1-3 above, and further in view of Kuraray (JP 48(1973)-13277 U).
- 24. Masuda et al in view of Hochberg et al do not disclose polyester fibers with a cross section with a flatness ratio of 1.2 to 4.
- 25. Kuraray discloses a fiber for wigs which has a cocoon shape cross section [page 1 lines 14-15]. The cocoon cross section is represented by the following figures:

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[FIG. 1]

wherein the ratio a/b (the flatness ratio) follows the formula: 4.0≥a/b≥1.5 [page 1 line 28]. This cross section is preferably used with a filament made of polyester rendered flame resistant [page 2 lines 12-14]. The cocoon cross section provides a fiber with unique gloss and excellent feeling [page 1 lines 30-31; lines 9-10].

26. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have prepared a fire retardant polyester fiber for artificial hair with projections, a brominated epoxy flame retardant, and a cross section that is cocoon shaped with a flatness ratio of 1.2 to 4 because Masuda et al in view of Hochberg et al teach that it is within the skill of the art to prepare a polyester fiber for artificial hair by blending a polyalkylene terephthalate with a brominated epoxy resin flame retardant and Kuraray teaches that it is within the skill of the art to a filament for a wig with a flame retardant polyester with a cocoon shaped cross section with a flatness ratio of 1.5 to 4.0. One would have been motivated to do use the cross section and flatness ratio of Kuraray because Kuraray teaches that this provides hair with unique gloss and excellent feeling. Absent any evidence to the contrary, there would have been a reasonable expectation of success in using the cross section and flatness ratio of Kuraray with the fiber composition of Masuda et al in view of Hochberg et al.

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27. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al (WO03/008679, herein US 7,332,563 B2 is used as an English language translation) in view of Hochberg et al (US 4,732,921) as applied to claims 1-3 above, and further in view of Kuraray (JP 48(1973)-13277 U) as applied to claim 11 above, and still in further view of Yokoe et al (US 5,083,967).

- 28. Masuda et al in view of Hochberg et al in further view of Kuraray do not disclose fibers with a mixture of fiber having a round cross section and a fiber having at least one modified cross section.
- 29. Yokoe et al disclose doll's hairs with several irregular shaped cross sections including horseshoe shaped, cocoon shaped, L-shaped, Y-shaped as well as round cross sectional shape [5:22-28]. Yokoe et al disclose that it is preferable that fibers of two or more kinds of the above mentioned shapes are used because it can be expected to more improve the bulkiness or the touch by combining the fibers having different irregular cross-sectional shapes with one another [5:28-33]. One would have readily envisaged a combination of any two shapes of cross sections in the ratio of 1:1.
- 30. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have prepared artificial hair from a polyester fiber with brominated epoxy flame retardant with a combination of a round cross section fiber and a modified fiber because Masuda et al in view of Hochberg et al in further view of Kuraray teach that it is within the skill of the art to prepare artificial hair from a polyester and brominated epoxy flame retardant with modified cross section specifically cocoon and Yokoe et al teach that it is within the skill of the art to prepare artificial hair with a

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combination of cross sections including round shaped and cocoon shaped. One would have been motivated to do use a combination of cross sections because Yokoe et al teach that it provides artificial hair with improved bulkiness and touch. Absent any evidence to the contrary, there would have been a reasonable expectation of success in improved artificial hair bulkiness and touch with the used of a combination of round and modified cross sections.

- 31. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al (WO03/008679, herein US 7,332,563 B2 is used as an English language translation) in view of Hochberg et al (US 4,732,921) as applied to claims 1-3 above, and further in view of Ogawa et al (US 4,506,043), and still in further view of Mawatari et al (US 5,614,568).
- 32. Masuda et al in view of Hochberg et al do not disclose a hydrophilic fiber treating agent as claimed in claims 16-20. However, Masuda et al disclose that an antistatic agent may be used on the fibers [23:14].
- 33. Ogawa et al disclose a thermoplastic polyester composition composed of polyethylene terephthalate [abstract]. Ogawa et al teach that suitable antistatic agents include nonionic surface active agents such as polyethylene oxide used in an amount of 0.05 to about 2% by weight based on the weight of the polyethylene terephthalate [11:22-30]. Selection of a known material based on its suitability for its intended use is prima facie obvious, see Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 65 USPQ 297 (1945). It would have been obvious to one having ordinary skill in the art at

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the time the invention was made to have used polyethylene oxide as a surface active agent on a polyester fiber with brominated epoxy resin flame retardant because Masuda et al teach that it is within the skill of the art to prepare a polyester fiber with brominated epoxy resin flame retardant and Ogawa et al teach that it is within the skill of the art to use polyethylene oxide as an antistatic surface active agent. One would have been motivated to do this because Masuda et al teach that an antistatic agent is an optional additive and Ogawa et al teach that polyethylene oxide is a suitable antistatic agent for polyethylene terephthalate.

- 34. Masuda et al in view of Hochberg et al and in further view of Ogawa et al do not disclose a preferable molecular weight of the polyethylene oxide antistatic agent.
- 35. Mawatari et al disclose a composition with an antistatic agent and teach that any usually used antistatic agent may be used including low molecular weight and high molecular weight antistatic agents [8:62-65]. Mawatari et al teach that one of these usually used antistatic agents is polyethylene oxide with a molecular weight of 200 to 5,000,000 [11:33-34]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used polyethylene oxide with molecular weight from 100 to 1000 as a surface active agent on a polyester fiber with brominated epoxy resin flame retardant because Masuda et al in view of Hochberg et al or Kishida et al and in further view of Ogawa et al teach that it is within the skill of the art to prepare a polyester fiber with brominated epoxy resin flame retardant and polyethylene oxide antistatic agent and Mawatari et al teach that it is within the skill of the art to use polyethylene oxide with a molecular weight of 200 or greater as an antistatic agent.

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Selection of a known material based on its suitability for its intended use is *prima facie* obvious, see *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

Response to Arguments

- 36. Applicant's arguments, see page 10 paragraph 6, filed 06/24/2009, with respect to lizaka et al have been fully considered and are persuasive. The rejection of 12/24/2008 has been withdrawn.
- 37. Applicant's arguments, see page 10 paragraph 7 through page 11 first paragraph, filed 06/24/2009, with respect to Akisuke Oku et al have been fully considered and are persuasive. The rejection of 12/24/2008 has been withdrawn.
- 38. Applicant's arguments filed 06/24/2009 with respect to Masuda et al in view of Hochberg et al have been fully considered but they are not persuasive. Applicant has merely alleged that one of ordinary skill in the art would never consider combining the teachings of Hochberg and Masuda and that there is no reasonable basis to combine the PBT flame retardant for molding resin with a fiber of Masuda. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references

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themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner has established a *prima facie* case of obviousness with a complete motivation statement for combining the references. Additionally, although the references appear to be from a different field of endeavor, they appear properly combinable since they "solve the same problem", which is flame retardency.

- 39. Applicants have not addressed Examiner's *prima facie* case of obviousness.
- 40. Applicant's arguments, see page 11 5th full paragraph through page 12 first paragraph, filed 06/24/2009, with respect to Masuda et al in view of Kishida et al have been fully considered and are persuasive. The rejection of 12/24/2008 has been withdrawn.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MIKE DOLLINGER whose telephone number is (571)270-5464. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/mmd/

/Randy Gulakowski/ Supervisory Patent Examiner, Art Unit 1796